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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,183	01/16/2002	Masahiro Uchida	111718	2795

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EXAMINER

LEFLORE, LAUREL E

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/046,183

Applicant(s)

UCHIDA ET AL.

Examiner

Laurel E LeFlore

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebby et al. 6,069,593 in view of Moriya 2001/0003707 A1.

In regard to claim 1, Lebby et al. discloses a mobile terminal. See figure 1, element 10 and column 2, line 33, disclosing "a portable electronic device".

The mobile terminal comprises an organic electroluminescent device that displays (see figures 1 and 2, element 28) and a liquid crystal device that displays (see figures 1 and 2, element 26). See column 3, lines 39-42, disclosing that "large direct view display 26 is a non-emissive liquid crystal display (LCD) and small direct view display 28 is an emissive display such as one utilizing organic electroluminescent technology." Lebby further discloses that the displays display images. See figure 1 and column 2, lines 49-51, disclosing, "Display carrier 14 includes in this particular embodiment a plurality of display apparatus 15 for viewing display images."

Lebby does not disclose that the mobile terminal is capable of being folded such that the organic electroluminescent device faces inside while the liquid crystal device faces outside.

Moriya discloses a mobile terminal that is capable of being folded such that one display device faces inside while another display device faces outside. See figures 4 and 5 and paragraphs [0039]-[0041] disclosing, "two housing sections 10 and 20 are connected by a hinge...to form the folded type portable radio apparatus...The first housing section 10 is provided with a...first display section 12...the respective back surfaces of the first and second housing sections 10 and 20 are provided with second and third display sections 13 and 23, respectively."

Moriya teaches in paragraph [0011], "in the conventional folded type portable radio apparatus, all of the sections such as the display section... are arranged on the same front surface of the housing in the opened state. Therefore, in the state in which the two housing sections are folded, the display section and the key operation section are hidden inside the housings...there is a disadvantageous inconvenience in the aspect of the operability." Moriya further teaches in paragraph [0020] that an "object of the present invention is to provide a folded type portable radio apparatus in which a display section can be used in the state in which the folded type portable radio apparatus is folded."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Lebby by having the mobile terminal mobile terminal is capable of being folded such that the organic electroluminescent device faces inside while the liquid crystal device faces outside, like the configuration of displays in the invention of Moriya. One would

have been motivated to make such a change based on the teaching of Moriya "to provide a folded type portable apparatus in which a display section can be used in the state in which the...apparatus is folded."

3. In regard to claim 12, see rejection of claim 12 in Paper No. 8, page 4.
4. Claims 4, 7 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Lebby et al. 6,069,593 in view of Moriya 2001/0003707 A1 as applied to claim 1 above, and further in view of Kimura et al. 2001/0035849 A1.

In regard to claims 4, 7 and 8, see rejection of claims 4, 7 and 8 in Paper No. 8, pages 4-5.

5. Claims 5, 6 and 9-11 rejected under 35 U.S.C. 103(a) as being unpatentable over Lebby et al. 6,069,593 in view of Moriya 2001/0003707 A1 as applied to claim 1 above, and further in view of Oshitani et al. 2002/005824 A1.

In regard to claim 6, see rejection of claim 6 in Paper No. 8, pages 5-6.

In regard to claim 5, see rejection of claim 5 in Paper No. 8, pages 6-7.

In regard to claims 9 and 10, see rejection of claims 9 and 10 in Paper No. 8, pages 7-8.

In regard to claim 11, see rejection of claim 11 in Paper No. 8, pages 8-9.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lebby et al. 6,069,593 in view of Moriya 2001/0003707 A1 as applied to claim 1 above, and further in view of Biferno 4,568,928.

In regard to claim 13, see rejection of claim 13 in Paper No. 8, pages 9-10.

7. Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebby et al. 6,069,593 in view of Moriya 2001/0003707 A1 as applied to claim 1 above, and further in view of Shiraishi et al. 5,144,292, and further in view of Yamashita et al. 2000-105573.

In regard to claims 3 and 14, see rejection of claims 3 and 14 in Paper No. 8, pages 10-11.

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lebby et al. 6,069,593 in view of Moriya 2001/0003707 A1 as applied to claim 1 above, and further in view of Shi et al. 5,736,754.

In regard to claim 15, Lebby in view of Moriya discloses an invention similar to that which is disclosed in claim 15. See rejection of claim 1 for similarities. Lebby in view of Moriya does not disclose that the organic electroluminescent device includes red, green and blue light emitting organic electroluminescent elements.

Shi discloses an organic electroluminescent device that includes red, green and blue light emitting organic electroluminescent elements. See column 1, lines 12-18, disclosing, "An organic LED array for image display applications is composed of a plurality of organic light emitting pixels arranged in rows and columns. To generate a full color display from a thin film electroluminescent array, there are two primary technologies known in the prior art. A full color array can be achieved by constructing three sub-pixels in one pixel, each sub-pixel emitting red, green or blue."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Lebby in view of Moriya by having the organic electroluminescent device include red, green and blue light emitting organic electroluminescent elements, as in the invention of Shi. One would have been motivated to make such a change based on the teaching of Shi that such an arrangement is a conventional and known technology and will "generate a full color display from a thin film electroluminescent array".

9. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebby et al. 6,069,593 in view of Moriya 2001/0003707 A1 as applied to claim 1 above, and further in view of Shimazaki 5,493,690.

In regard to claim 15, Lebby in view of Moriya discloses an invention similar to that which is disclosed in claim 15. See rejection of claim 1 for similarities. Lebby in view of Moriya does not disclose that the organic electroluminescent display (the display facing inside) is automatically turned OFF when the mobile terminal is folded from the opened state and automatically turned ON when the mobile terminal is opened from the folded state.

Shimazaki discloses a foldable telephone set in which the display facing inside is automatically turned OFF when the mobile terminal is folded from the opened state and automatically turned ON when the mobile terminal is opened from the folded state. See figures 1(b) and 1(a) and note element 15 of fig. 1(b), depicting the display of Shimazaki, which faces the inside of the mobile device.

Shimazaki teaches in column 2, lines 42-47, "where the foldable portable telephone set is constructed such that the display device itself...is automatically switched on or off in response to an opening or closing movement of the cover section, the power dissipation of the telephone set can be reduced."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Lebby in view of Moriya by having the display facing inside automatically turned OFF when the mobile terminal is folded from the opened state and automatically turned ON when the mobile terminal is opened from the folded state, as in the invention of Shimazaki. One would have been motivated to make such a change based on the teaching of Shimazaki that "the power dissipation of the telephone set can be reduced" by having the inside display "automatically switched on or off in response to an opening or closing movement of the cover section".

Response to Arguments

10. The title and specification have been amended to overcome informalities. The objection to the specification of Paper No. 8 is withdrawn.
11. Applicant's arguments with respect to claims 1 and 2-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lechtonen et al. 6,014,573 discloses a mobile communication device in which displays face inside and outside and opening and closing the device can operate a switch to turn off a display.

Smith et al. 6,574,487 B1 discloses a mobile phone with a display facing inside and a display facing outside.

Narayanaswamy et al. 6,144,358 discloses a multi-display electronic device with open and closed configurations.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurel E LeFlore whose telephone number is (703) 305-8627. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on (703) 305-3885. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LEL
19 March 2004



JOSEPH MANCUSO
PRIMARY EXAMINER